The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A rotor comprising:

a rotor core having a rotor surface;

a plurality of permanent magnets embedded in the rotor core with each of the permanent magnets defining a pole of the rotor, each pole of the rotor having a pole center;

a plurality of first non-magnetic layers being located between adjacent pairs of the permanent magnets along the rotor surface, each first non-magnetic layer being continuous or adjacent to a peripheral edge section of one of the permanent magnets in a vicinity between the poles and a vicinity of the rotor surface; and

a plurality of second non-magnetic layers being located in a vicinity of the rotor surface at pole center side positions with respect to the first non-magnetic layers,

the first non-magnetic layers and the second non-magnetic layers being positioned to cancel <u>5-th order harmonics or 7-th order harmonics</u> ~~n-th order harmonics (where n is an odd number and is equal to or greater than 3)~~ of an induction voltage, <u>and</u>

the first non-magnetic layers and the second non-magnetic layers being <u>independent from one another, and the rotor core being interposed between them, wherein</u>

<u>an angle $\theta 1$ being measured between a pole center side edge section, in the vicinity of the rotor surface, of the first non-magnetic layer and a position between the poles, and</u>

<u>an angle $\theta 2$ being measured between a pole center side edge section, in the vicinity of the rotor surface, of the second non-magnetic layer and the position, wherein</u>

$$\underline{0 < \theta 1 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(5 \cdot Pn)}$$

<u>or</u>

$$\underline{0 < \theta 1 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(7 \cdot Pn)}$$

<u>where a pole pair number is Pn</u> ~~positioned symmetrically relative to the pole centers~~.

2.-6. (Cancelled)

7. (Currently Amended) The rotor as set forth in ~~claim 6~~ claim 1, wherein the angle $\theta 1$ and the angle $\theta 2$ satisfy either

$$0 < \theta 1 < 180/(5 \cdot Pn) \text{ and } \theta 2 = 180/(5 \cdot Pn)$$

or

$$0 < \theta 1 < 180/(7 \cdot Pn) \text{ and } \theta 2 = 180/(7 \cdot Pn).$$

8. (Currently Amended) ~~The~~ A rotor ~~as set forth in claim 4, wherein~~ comprising:

a rotor core having a rotor surface;

a plurality of permanent magnets embedded in the rotor core with each of the permanent magnets defining a pole of the rotor, each pole of the rotor having a pole center;

a plurality of first non-magnetic layers being located between adjacent pairs of the permanent magnets along the rotor surface, each first non-magnetic layer being continuous or adjacent to a peripheral edge section of one of the permanent magnets in a vicinity between the poles and a vicinity of the rotor surface; and

a plurality of second non-magnetic layers being located in a vicinity of the rotor surface at pole center side positions with respect to the first non-magnetic layers,

the first non-magnetic layers and the second non-magnetic layers being positioned to cancel 5-th order harmonics or 7-th order harmonics of an induction voltage,

the first non-magnetic layers and the second non-magnetic layers being independent from one another, and the rotor core being interposed between them,

an angle $\theta 5$ ~~is~~ being measured between a pole center side edge section, in the vicinity of the rotor surface, of the first non-magnetic layer and a position between the poles,

an angle $\theta 6$ ~~is~~ being measured between a pole center side edge section, in the vicinity of the rotor surface, of the second non-magnetic layer and the position between the poles, wherein

$$0 < \theta 5 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 6 \leqq 180 \times 2/(5 \cdot Pn)$$

where a pole pair number is Pn,

a rotor core section width has points of inflection, the rotor core section width being sandwiched by the first non-magnetic layers and the second non-magnetic layers and the rotor surface, <u>and</u>

angles θ 7 and θ 8 <u>being</u> ~~are~~ measured between respective points of inflection and the position between the poles, wherein

$0 < \theta 7 < 180/(7 \cdot Pn)$ and $180/(7 \cdot Pn) \leqq \theta 8 \leqq 180 \times 2/(7 \cdot Pn)$

where a pole pair number is Pn, and

a relationship of the angles θ 5, θ 6, θ 7 and θ 8 is $\theta 7 < \theta 5 < \theta 8 < \theta 6$.

9. (Previously Presented) The rotor as set forth in claim 8, wherein

the angle θ 5 is $0 < \theta 5 < 180/(5 \cdot Pn)$, the angle θ 7 is $0 < \theta 7 < 180/(7 \cdot Pn)$, the angle θ 6 is $180/(5 \cdot Pn)$, and the angle θ 8 is $180/(7 \cdot Pn)$.

10. (Previously Presented) The rotor as set forth in claim 1, wherein

each of the permanent magnets is divided into multiple layers in a radial direction.

11. (Previously Presented) The rotor as set forth in claim 10, wherein

each of the permanent magnets is divided into two layers in a radial direction,

an angle θ 3 is measured between a pole center side edge section, in the vicinity of a rotor surface, of the first non-magnetic layer continuous or adjacent to the permanent magnet in an inner side of the rotor and a position between the poles, and

an angle θ 4 is measured between a pole center side edge section, in the vicinity of the rotor surface, of the first non-magnetic layer continuous or adjacent to the permanent magnet in an outer side of the rotor and the position between the poles, wherein

$0 < \theta 3 < 180/(5 \cdot Pn)$ and $180/(5 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(5 \cdot Pn)$

or

$0 < \theta 3 < 180/(7 \cdot Pn)$ and $180/(7 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(7 \cdot Pn)$

where a pole pair number is Pn.

12. (Previously Presented) The rotor as set forth in claim 11, wherein the angle $\theta 3$ and the angle $\theta 4$ satisfy either

$0 < \theta 3 < 180/(5 \cdot Pn)$ and $\theta 4 = 180/(5 \cdot Pn)$

or

$0 < \theta 3 < 180/(7 \cdot Pn)$ and $\theta 4 = 180/(7 \cdot Pn)$.

13. (Previously Presented) The rotor as set forth in claim 10, wherein

each of the permanent magnets is divided into two layers in a radial direction, and an angle $\theta 9$ between a pole center side edge section, in the vicinity of the rotor surface, of the permanent magnet in an inner side of the rotor and a position between the poles, and

an angle $\theta 10$ is measured between a pole center side edge section, in the vicinity of the rotor surface, of the permanent magnet in an outer side of the rotor and the position between the poles, wherein

$0 < \theta 9 < 180/(5 \cdot Pn)$ and $180/(5 \cdot Pn) \leqq \theta 10 \leqq 180 \times 2/(5 \cdot Pn)$

where a pole pair number is Pn,

a rotor core section width has points of inflection, the rotor core section width being sandwiched by the first non-magnetic layer continuous or adjacent to the permanent magnet on the inner side of the rotor and the first non-magnetic layer continuous or adjacent to the permanent magnet on the outer side of the rotor, and

angles $\theta 11$ and $\theta 12$ are measured between respective points of inflection and the position between the poles, wherein

$0 < \theta 11 < 180/(7 \cdot Pn)$ and $180/(7 \cdot Pn) \leqq \theta 12 \leqq 180 \times 2/(7 \cdot Pn)$

where a pole pair number is Pn, and

a relationship of the angles $\theta 9$, $\theta 10$, $\theta 11$ and $\theta 12$ is $\theta 11 < \theta 9 < \theta 12 < \theta 10$.

14. (Previously Presented) The rotor as set forth in claim 13, wherein

the angle $\theta 9$ is $0 < \theta 9 < 180/(5 \cdot Pn)$, the angle $\theta 11$ is $0 < \theta 11 < 180/(7 \cdot Pn)$, the angle $\theta 10$ is $180/(5 \cdot Pn)$, and the angle $\theta 12$ is $180/(7 \cdot Pn)$.

15.-18. (Cancelled)

19. (Currently Amended) The rotor as set forth in ~~claim 2~~ claim 8 wherein each of the permanent magnets is divided into multiple layers in a radial direction.

20. (Previously Presented) The rotor as set forth in claim 19, wherein each of the permanent magnets is divided into two layers in a radial direction,

an angle $\theta 3$ is measured between a pole center side edge section, in the vicinity of the rotor surface, of the first non-magnetic layer continuous or adjacent to the permanent magnet in an inner side of the rotor and a position between the poles, and

an angle $\theta 4$ is measured between a pole center side edge section, in the vicinity of the rotor surface, of the first non-magnetic layer continuous or adjacent to the permanent magnet in an outer side of the rotor and the position between the poles, wherein

$0 < \theta 3 < 180/(5 \cdot Pn)$ and $180/(5 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(5 \cdot Pn)$

or

$0 < \theta 3 < 180/(7 \cdot Pn)$ and $180/(7 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(7 \cdot Pn)$

where a pole pair number is Pn.

21. (Cancelled)

22. (New) The rotor as set forth in claim 20, wherein the angle $\theta 3$ and the angle $\theta 4$ satisfy either

$0 < \theta 3 < 180/(5 \cdot Pn)$ and $\theta 4 = 180/(5 \cdot Pn)$

or

$0 < \theta 3 < 180/(7 \cdot Pn)$ and $\theta 4 = 180/(7 \cdot Pn)$.

23. (New) The rotor as set forth in claim 19, wherein

each of the permanent magnets is divided into two layers in a radial direction, and an angle $\theta 9$ between a pole center side edge section, in the vicinity of the rotor surface, of the permanent magnet in an inner side of the rotor and a position between the poles, and

an angle θ 10 is measured between a pole center side edge section, in the vicinity of the rotor surface, of the permanent magnet in an outer side of the rotor and the position between the poles, wherein

$$0 < \theta 9 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 10 \leqq 180 \times 2/(5 \cdot Pn)$$

where a pole pair number is Pn,

a rotor core section width has points of inflection, the rotor core section width being sandwiched by the first non-magnetic layer continuous or adjacent to the permanent magnet on the inner side of the rotor and the first non-magnetic layer continuous or adjacent to the permanent magnet on the outer side of the rotor, and

angles θ 11 and θ 12 are measured between respective points of inflection and the position between the poles, wherein

$$0 < \theta 11 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 12 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn, and

a relationship of the angles θ 9, θ 10, θ 11 and θ 12 is $\theta 11 < \theta 9 < \theta 12 < \theta 10$.

24. (New) The rotor as set forth in claim 23, wherein

the angle θ 9 is $0 < \theta 9 < 180/(5 \cdot Pn)$, the angle θ 11 is $0 < \theta 11 < 180/(7 \cdot Pn)$, the angle θ 10 is $180/(5 \cdot Pn)$, and the angle θ 12 is $180/(7 \cdot Pn)$.